



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,465	07/13/2004	Masao Kino	26C-038-TN	8135

23400 7590 11/13/2006

POSZ LAW GROUP, PLC
12040 SOUTH LAKES DRIVE
SUITE 101
RESTON, VA 20191

EXAMINER

AMORES, KAREN J

ART UNIT	PAPER NUMBER
----------	--------------

3616

DATE MAILED: 11/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/500,465	Applicant(s) KINO ET AL.	
	Examiner Karen J. Amores	Art Unit 3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07/13/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-5, 7-11 is/are rejected.
- 7) ☒ Claim(s) 2 and 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>11/1/05, 7/13/2004</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1 and 9 are rejected under 35 U.S.C. 102(a) as being anticipated by Tanase et al., JP2002046567 (Tanase). Tanase discloses a head-protecting airbag device for a vehicle comprising an airbag folded and housed in the upper edge of windows inside a vehicle, and deployable downward along the windows when fed with inflation gas, wherein:

the airbag includes:

a gas admissive portion (item 15), which is inflatable with inflation gas by separating a vehicle's inner wall and an outer wall of the airbag;

a non-admissive portion (42), which is formed by joining the vehicle's inner wall and outer wall and admits no inflation gas;

the gas admissive portion includes:

a gas feed passage extending along the upper edge of the airbag as flatly expanded for feeding inflation gas along front-rear direction (28); and

a plurality of vertical chambers juxtaposed along the front-rear direction of the vehicle (17, 22 – 25), each of the vertical chambers being provided at the upper end with a communication port for communicating with the gas feed passage (passage for G1-G4); and

Art Unit: 3616

a gas flow regulating means (18 and 19) located in at least one of the vertical chambers, whereby when inflation gas flows into the vertical chamber via communication port, the inflation gas is directly obliquely down and toward the vehicle's exterior. The examiner interprets the broad definition for a gas flow regulating means to be the geometry and structure of the airbag.

3. In reference to claim 9, Tanase discloses the head-protecting airbag device as described above, wherein:

the gas admissive portion includes a joining inflatable portion (area above 17, 22 - 25) located between the gas feed passage and the vertical chambers for, upon airbag deployment, inflating between a panel as part of the vehicle body and an airbag cover in the vicinity of the housing position of the airbag, the airbag cover covering an airbag side toward the vehicle's interior; and

the joining inflatable portion constitutes the gas flow regulating means.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanase in view of Nishikaji, EP 1069007 (Nishikaji). Tanase discloses the head-protecting airbag device as described above. Tanase does not disclose a flexible belt. Nishikaji teaches a flexible belt (51 and 54) in an exterior side being joined to the vicinity of at least one vertical chamber

Art Unit: 3616

and to a vehicle body in the vicinity of a housing position of the airbag (figure 14), whereby the vertical chamber, when inflated, is pressed toward the window; and

the belt constitutes the gas flow regulating means, as providing longitudinal tension to make a substantial height of the airbag (Nishikaji, paragraph 66).

Therefore, a person having ordinary skill in the art at the time the invention was made would find it obvious to modify Tanase as taught by Nishikaji to include the flexible belt to provide tension set for an effective height (column 17, line 41).

6. In reference to claim 10, Tanase does not directly disclose a holder. Nishikaji teaches a holder (47) located proximate to the housing position of the airbag for holding and fixing the periphery of the communication port of at least one of the vertical chambers (front pillar 2 and rear pillar 4) upon airbag deployment; and

the holder constitutes the gas flow regulating means. Therefore, a person having ordinary skill in the art at the time the invention was made would find it obvious to modify Tanase as taught by Nishikaji to include the holder to fix the gas feed passage to the vehicle body (column 16, line 11).

7. Claims 4, 5, 7/4, 7/5, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanase in view of Niederman et al. US 6,338,498 (Niederman). Tanase discloses the head-protecting airbag device as described above. Tanase does not directly include an auxiliary chamber. Niederman also discloses the gas admissive portion (40) to include an auxiliary chamber (66) located above the gas feed passage (54) for, upon airbag deployment, inflating between a panel (38) as part of the vehicle body and an airbag cover in the vicinity of the

Art Unit: 3616

housing position of the airbag, the airbag cover covering an airbag side toward the vehicle's interior; and

the auxiliary chamber constitutes the gas flow regulating means.

8. In reference to claim 5, Niederman further discloses an auxiliary chamber located in plurality (areas between 70), respectively above predetermined numbers of the vertical chambers (areas between 56).

9. In reference to claims 7/4 and 7/5, Niederman also discloses a mounting portion (60) for attachment to the pane of vehicle body, the mounting portion being located, when the airbag is completely inflated, below the upper end of the auxiliary chamber and above the vertical chamber.

10. In reference to claim 8, Tanase discloses the head-protecting airbag device as described above, further:

the airbag includes a secondary chamber (16) inflatable below the gas feed passage, the secondary chamber not being communicated with the gas feed passage at the upper end (34c);

the secondary chamber is communicated with the lower part of at least one of the front and rear vertical chambers (area below G5), whereby inflation gas flows into the secondary chamber.

Therefore, a person having ordinary skill in the art at the time the invention was made would find it obvious to modify Tanase as taught by Niederman to include the auxiliary chamber, or auxiliary chambers in plurality, a mounting portion below the auxiliary chamber and above the vertical chamber, and locate the auxiliary chamber in the front and rear of the secondary chamber. The motivation is to allow the inflatable portion above the main body

Art Unit: 3616

portion to expand in cushioning relation between the roof rail and the occupant (Niederman, abstract), attach it corresponding to the path of the roof rail (column 4, line 61), and to control inflation characteristics of the airbag and provide additional cushioning over regions adjacent to the occupant to be protected (column 1, line 56).

11. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tanase in view of Urushi, JP 2001354102 (Urushi). Tanase discloses the head-protecting airbag device as described above. Tanase does not directly disclose a part of the airbag cover suppressing the airbag from opening toward the vehicle's interior. Urushi teaches a part of the airbag cover (31) covering an airbag toward the vehicle's interior in the vicinity of the housing position of the airbag is suppressed from opening toward the vehicle's interior, whereby at least one of the vertical chambers deploys while being pressed down toward the vehicle's exterior; and

the part of the airbag cover suppressed from opening constitutes the gas flow regulating means. Therefore, a person having ordinary skill in the art would find it obvious to modify Tanase as taught by Urushi to include the airbag cover to suppress the airbag from opening towards the interior. The motivation is to prevent a part of an airbag from getting on an upper surface of a headrest in the middle of inflating and unfolding in a head part protective airbag device (Urushi, abstract).

Allowable Subject Matter

12. Claims 2, 6, and 7/6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

References considered pertinent to Applicant's disclosure are listed on form PTO-892. All references listed on form PTO-892 are cited in their entirety.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen J. Amores whose telephone number is (571)-272-6212. The examiner can normally be reached on Monday through Friday, 8:00 AM - 5:00 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on (571)-272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Karen J. Amores
Examiner
AU 3616



KJA
19 October 2006



10/30/06
PAUL N. DICKSON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600